Review of: "Measuring the efficacy of a vaccine during an epidemic"

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Potential competing interests: No potential competing interests to declare.

The paper is concerned with fact during the vaccine rush that underestimation growing with the fraction of infectious individuals present in the population during the experiment and with the severity of the epidemic measured by its basic reproduction number. Some critics are provided near the epidemic peak.

The work is recommendable for publication. However, the following concerns must be clarified beforehand:

A) – Language is fluent and fine overall, with some random typos.

B) – It is apparent that the work is under progression, not completed yet.

C) – Vaccine efficacy is described as one minus some measure of relative risk. What is the author's specific suggestion here? Is it (1)?

D) – SIR models with parameters in the range of COVID19 estimates are assumed. However, SEIR with the dynamics is expected to be better. Please discuss.

E) - The following relevant works would attract the interest of the researchers in the field "An extended epidemic model with vaccination: Weak-immune SIRVI (DOI: 10.1016/j.physa.2022.127429)" and "Explicit formulae for the peak time of an epidemic from the SIR model (DOI: 10.1016/J.PHYSD.2021.132902)".

F) – The underestimate trend in figure 1 is not too high.

G) – What are fortcoming issues?